AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. **(currently amended):** A fusion protein composition comprising a fusion protein molecule of a binding protein and an antibody Fc region having complex type N-glycoside-linked sugar chains, wherein the complex type N-glycoside-linked sugar chains have a structure in which fucose is not bound to N-acetylglucosamine in the reducing end in the sugar chains, and wherein the binding protein comprises at least one protein selected from the group consisting of a single chain antibody, a soluble receptor and a ligand protein.

2. **(original):** The fusion protein composition according to claim 1, wherein the complex type N-glycoside-linked sugar chains are sugar chains in which 1-position of fucose is not bound to 6-position of N-acetylglucosamine in the reducing end through α-bond in the sugar chains.

3. **(previously presented):** The fusion protein composition according to claim 1, wherein the antibody Fc region is an IgG class of a human antibody.

4. **(original):** The fusion protein composition according to claim 3, wherein the

antibody Fc region is an IgG1 class of a human antibody.

5. (original): The fusion protein composition according to claim 4, wherein the antibody fusion protein composition comprises an IgG1 class heavy chain constant region domain 2 (CH_2) of a human antibody.

6. (original): The fusion protein composition according to claim 5, wherein the fusion protein composition comprises a hinge region, a heavy chain constant region domain 2 (CH_2) and a heavy chain constant region domain 3 (CH_3) of a human IgG1 class antibody.

7-12. (canceled).

13. (currently amended): The fusion protein composition according to ~~claim 7~~claim 1, wherein the ~~binding fragment of an~~single chain antibody is a bispecific single-chain antibody.

14. (currently amended): The fusion protein composition according to ~~claim 7~~claim 1, wherein the soluble receptor is a soluble TNF (tumor necrosis factor) receptor II.

15. (currently amended): The fusion protein composition according to ~~claim 15~~claim 14, wherein the soluble receptor comprises the amino acid sequence

represented by SEQ ID NO:64.

16. (previously presented): The fusion protein composition according to claim 14, wherein the fusion protein is produced by FERM BP-8499.

17. (currently amended): The fusion protein composition according to ~~claim 7~~claim 1, wherein the ligand protein is LFA-3 (leukocyte function antigen-3).

18. (currently amended): The fusion protein composition according to ~~claim 16~~claim 17, wherein the ligand protein comprises the amino acid sequence represented by SEQ ID NO:65.

19. (previously presented): The fusion protein composition according to claim 17, wherein the fusion protein is produced by FERM BP-8500.

20. (previously presented): The fusion protein composition according to claim 1, wherein the fusion protein composition is a dimer.

21. (previously presented): A transformant obtainable by introducing a DNA encoding the fusion protein according to claim 1 into a host cell.

22. (original): The transformant according to claim 21, wherein the host cell is a cell in which a genome is modified so that an enzyme relating to synthesis of an intracellular sugar nucleotide, GDP-fucose or an enzyme relating to a modification of a sugar chain in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through a-bond in the complex type N-glycoside-linked sugar chain is inactivated.

23. (original): The transformant according to claim 22, wherein the host cell is a cell in which all of alleles on a genome encoding an enzyme relating to synthesis of an intracellular sugar nucleotide, GDP-fucose or an enzyme relating to a modification of a sugar chain in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α-bond in the complex type N-glycoside-linked sugar chain are knocked out.

24. (previously presented): The transformant according to claim 22, wherein the enzyme relating to synthesis of an intracellular sugar nucleotide, GDP-fucose, is an enzyme selected from the group consisting of GDP-mannose 4,6-dehydratase (GMD) and GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase (Fx).

25. (original): The transformant according to claim 24, wherein the GDP-mannose 4,6-dehydratase is a protein encoded by a DNA selected from the following (a) or (b):

(a) a DNA comprising the nucleotide sequence represented by SEQ ID NO:1;

(b) a DNA which hybridizes with a DNA consisting of the nucleotide sequence represented by SEQ ID NO:1 under stringent conditions and which encodes a protein having GDP-mannose 4,6-dehydratase activity.

26. (original): The transformant according to claim 24, wherein the GDP-mannose 4,6-dehydratase is a protein selected from the group consisting of the following (a), (b) and (c):

(a) a protein comprising the amino acid sequence represented by SEQ ID NO:2;

(b) a protein consisting of an amino acid sequence wherein one or more amino acid(s) is/are deleted, substituted, inserted and/or added in the amino acid sequence represented by SEQ ID NO:2 and having GDP-mannose 4,6-dehydtratase activity;

(c) a protein consisting of an amino acid sequence which has 80% or more homology to the amino acid sequence represented by SEQ ID NO:2 and having GDP-mannose 4,6-dehydratase activity.

27. (original): The transformant according to claim 24, wherein the GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase is a protein encoded by a DNA selected from the following (a) or (b):

(a) a DNA comprising the nucleotide sequence represented by SEQ ID NO:3;

(b) a DNA which hybridizes with a DNA consisting of the nucleotide sequence represented by SEQ ID NO:3 under stringent conditions and which encodes a protein having

GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase activity.

28. (original): The transformant according to claim 24, wherein the GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase activity is a protein selected from the group consisting of the following (a) to (c):

(a) a protein comprising the amino acid sequence represented by SEQ ID NO:4;

(b) a protein consisting of an amino acid sequence wherein one or more amino acid(s) is/are deleted, substituted, inserted and/or added in the amino acid sequence represented by SEQ ID NO:4 and having GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase activity;

(c) a protein consisting of an amino acid sequence which has 80% or more homology to the amino acid sequence represented by SEQ ID NO:4 and having G GDP-4-keto-6-deoxy-D-mannose 3,5-epimerase activity.

29. (previously presented): The transformant according to claim 22, wherein the enzyme relating to a modification of a sugar chain in which 1-position of fucose is bound to 6-position of N-acetylglucosamine in the reducing end through α-bond in the complex type N-glycoside-linked sugar chain is α1,6-fucosyltransferase.

30. (original): The transformant according to claim 29, wherein the α1,6-fucosyltransferase is a protein encoded by a DNA selected from the group consisting of the following (a) to (d):

(a) a DNA comprising the nucleotide sequence represented by SEQ ID NO:5;

(b) a DNA comprising the nucleotide sequence represented by SEQ ID NO:6;

(c) a DNA which hybridizes with a DNA consisting of the nucleotide sequence represented by SEQ ID NO:5 under stringent conditions and which encodes a protein having α1,6-fucosyltransferase activity;

(d) a DNA which hybridizes with a DNA consisting of the nucleotide sequence represented by SEQ ID NO:6 under stringent conditions and which encodes a protein having α1,6-fucosyltransferase activity.

31. (original): The transformant according to claim 29, wherein the α1,6-fucosyltransferase is a protein selected from the group consisting of the following (a) to (f):

(a) a protein comprising the amino acid sequence represented by SEQ ID NO:7;

(b) a protein comprising the amino acid sequence represented by SEQ ID NO:8;

(c) a protein consisting of an amino acid sequence wherein one or more amino acid(s) is/are deleted, substituted, inserted and/or added in the amino acid sequence represented by SEQ ID NO:7 and having α1,6-fucosyltransferase activity;

(d) a protein consisting of an amino acid sequence wherein one or more amino acid(s) is/are deleted, substituted, inserted and/or added in the amino acid sequence represented by SEQ ID NO:8 and having α1,6-fucosyltransferase activity;

(e) a protein consisting of an amino acid sequence which has 80% or more homology to the amino acid sequence represented by SEQ ID NO:7 and having

α1,6-fucosyltransferase activity;

(f) a protein consisting of an amino acid sequence which has 80% or more homology to the amino acid sequence represented by SEQ ID NO:8 and having α1,6-fucosyltransferase activity.

32. (previously presented): The transformant according to claim 21, wherein the host cell is a cell selected from the group consisting of the following (a) to (h):

(a) a CHO cell derived from Chinese hamster ovary tissue;

(b) a rat myeloma cell line YB2/3HL.P2.G11.16Ag.20 cell;

(c) a mouse myeloma cell line NSO cell;

(d) a mouse myeloma cell line SP2/0-Ag14 cell;

(e) a BHK cell derived from Syrian hamster kidney tissue;

(f) a human leukemia cell line Namalwa cell;

(g) an embryonic stem cell;

(h) a fertilized egg cell.

33. (previously presented): The transformant according to claim 21, wherein the transformant is FERM BP-8499.

34. (previously presented): The transformant according to claim 21, wherein the transformant is FERM BP-8500.

35. (currently amended): A process for producing the fusion protein composition according to any one of claims 1 to 20, which comprises culturing ~~transformant~~ a transformant obtainable by introducing a DNA encoding the fusion protein according to claim 1 into a host cell, in a medium to form and accumulate the fusion protein composition in the culture and recovering and purifying the fusion protein composition from the culture.

36. (currently amended): The fusion protein according to claim 1 obtained by a process comprising culturing a transformant with DNA encoding said fusion protein in medium to form and accumulate said fusion protein in culture, and recovering and purifying the antibody from the culture~~, which is obtainable by the process according to claim 35~~.

37. (previously presented): A medicament comprising the fusion protein composition according to claim 1 and a pharmaceutically acceptable carrier.

38. (previously presented): A method for preventing or treating tumor, inflammatory diseases or autoimmune diseases, comprising administering to a subject in need thereof an effective amount of the fusion protein composition according to claim 1.

39. (previously presented): The method according to claim 38, wherein the tumor

is blood tumor or cancer.